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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,849	12/21/2000	William J. Labarge	DP-302479	2201

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EXAMINER
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ELVE, MARIA ALEXANDRA

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/745,849

Applicant(s)

LABARGE ET AL.

Examiner

M. Alexandra Elve

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5-14 and 18-28 is/are pending in the application.
- 4a) Of the above claim(s) 13,14 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,7,11,12,24,26 and 27 is/are rejected.
- 7) ☒ Claim(s) 6,8-10,18-23 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_ 5/04, 2/04, 7/02, 4/02, 3/01
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

Claims 13-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group II, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/26/04.

Newly submitted claim 28 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claim 28 is drawn to the non-elected claim 14, group II.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 28 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Applicant's election with traverse of group I in the reply filed on 5/26/04 is acknowledged. The traversal is on the ground(s) that claims are not process and apparatus claims. This is not found persuasive because the claims are separate and distinct, one drawn to a process and one drawn to an apparatus. Furthermore, the NOx may be controlled in a thermal process and does not require a non-thermal plasma reactor.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Objections***

Claim 5 is objected to because of the following informalities: claim 5 depends on cancelled claim 2. For purposes of examination only the examiner has assumed that claim 5 depends on claim 1. Appropriate correction is required.

***Oath/Declaration***

It was not executed in accordance with either 37 CFR 1.66 or 1.68.  
The oath has not been signed by any of the three inventors.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 7, 11-12, 24 & 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Stiles et al. (US Pat. 5,362,463).

Stiles et al. discloses removing NO<sub>x</sub> from combustion gases by adsorption. Reduction of NO<sub>x</sub> is 100% complete over a catalyst comprising chromium, copper, cobalt or nickel oxides supported on gamma alumina or the same composition as the adsorbent. One of the most effective adsorbent catalysts is 50% manganese oxide, 50% aluminum oxide; however, ratios of 20 to 80% manganese oxide yield the same results. Oxides of iron, nickel, cobalt, zinc, copper, molybdenum and tungsten, and

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combinations thereof may substitute manganese oxide. In addition, other substitutes may be silica, thoria, magnesia, calcia, strontia, titania, zirconia, stania, baria or mixtures thereof. This may be in the form of filter cake. (abstract, col. 4, lines 30-35, col. 6, lines 7-25, col. 7, lines 35-68, col. 11, lines 40-65)

### ***Allowable Subject Matter***

Claims 6, 8-10, 18-23 & 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See US PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is 571-272-1173. The examiner can normally be reached on 6:30-3:00 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 8, 2004.



M. ALEXANDRA ELVE  
PRIMARY EXAMINER